

## **CLAIMS**

1. A method comprising:

encoding a first frame of data;

generating a first timestamp associated with the first frame of data, wherein the first timestamp includes complete timing information;

transmitting the first frame of data and the associated first timestamp to a destination;

encoding a second frame of data;

generating a second timestamp associated with the second frame of data, wherein the second timestamp includes a portion of the complete timing information; and

transmitting the second frame of data and the associated second timestamp to the destination.

2. A method as recited in claim 1 further comprising:

encoding a third frame of data;

generating a third timestamp associated with the third frame of data, wherein the third timestamp includes a portion of the complete timing information; and

transmitting the third frame of data and the associated third timestamp to the destination.

1           **3.**    A method as recited in claim 1 further comprising:  
2           identifying timing information related to transmitting the first and second  
3 frames of data; and  
4           transmitting the timing information to the destination.  
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6           **4.**    A method as recited in claim 1 wherein the first timestamp includes  
7 hour information, minute information, second information, and a frame number.  
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9           **5.**    A method as recited in claim 1 wherein the first timestamp includes  
10 an offset value that is used to relate the time associated with a frame of data to true  
11 time.  
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13           **6.**    A method as recited in claim 1 wherein the second timestamp  
14 includes a frame number.  
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16           **7.**    A method as recited in claim 1 further comprising:  
17           encoding a plurality of frames of data; and  
18           generating additional timestamps associated with each of the plurality of  
19 frames of data, wherein the majority of the additional timestamps include a portion  
20 of the complete timing information.  
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1           **8.**     A method as recited in claim 1 further comprising:  
2           encoding a plurality of frames of data;  
3           generating a full timestamp associated with one of the plurality of frames of  
4 data, wherein the full timestamp includes the complete timing information; and  
5           generating a plurality of compressed timestamps associated with the frames  
6 of data that are not associated with the full timestamp, wherein the compressed  
7 timestamps include a portion of the complete timing information.

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9           **9.**     One or more computer-readable memories containing a computer  
10 program that is executable by a processor to perform the method recited in claim  
11 1.

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13           **10.**    A method comprising:  
14           identifying multimedia content to be encoded;  
15           encoding the identified multimedia content into a plurality of frames of  
16 data;  
17           generating a plurality of full timestamps associated with a portion of the  
18 frames of data, wherein each full timestamp contains complete time information;  
19 and  
20           generating a plurality of compressed timestamps associated with frames of  
21 data that are not associated with a full timestamp, wherein each compressed  
22 timestamp contains a portion of the complete time information.

1           **11.**    A method as recited in claim 10 wherein the full timestamps are  
2 associated with every Xth frame of data.

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4           **12.**    A method as recited in claim 10 wherein the full timestamps are  
5 associated with frames of data spaced apart by a predetermined time period.

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7           **13.**    A method as recited in claim 10 wherein the full timestamps include  
8 hour information, minute information, second information, and a frame number.

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10          **14.**    A method as recited in claim 10 wherein the full timestamps include  
11 an offset value that is used to relate the time associated with a frame of data to true  
12 time.

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14          **15.**    A method as recited in claim 10 wherein the compressed timestamps  
15 include a frame number.

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17          **16.**    A method as recited in claim 10 further comprising storing the  
18 frames of data and the associated timestamps.

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20          **17.**    A method as recited in claim 10 further comprising transmitting the  
21 frames of data and the associated timestamps to a plurality of destinations.

1           **18.**   One or more computer-readable memories containing a computer  
2 program that is executable by a processor to perform the method recited in claim  
3 10.

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5           **19.**   A method comprising:  
6       receiving a first frame of data;  
7       receiving a first timestamp associated with the first frame of data, wherein  
8 the first timestamp includes complete timing information for the first frame of  
9 data;  
10      receiving a second frame of data; and  
11      receiving a second timestamp associated with the second frame of data,  
12 wherein the second timestamp includes a portion of the timing information.

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14          **20.**   A method as recited in claim 19 further comprising decoding the  
15 first frame of data and the second frame of data.

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17          **21.**   A method as recited in claim 19 further comprising:  
18      receiving a third frame of data;  
19      receiving a third timestamp associated with the third frame of data, wherein  
20 the third timestamp includes a portion of the timing information; and  
21      decoding the third frame of data.

1           **22.**    A method as recited in claim 19 further comprising receiving timing  
2 information related to the manner in which frames of data are transmitted from a  
3 data source.

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5           **23.**    A method as recited in claim 19 wherein the first timestamp is a full  
6 timestamp and the second timestamp is a compressed timestamp.

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8           **24.**    A method as recited in claim 19 wherein receiving the first  
9 timestamp includes updating all timing parameters with the information contained  
10 in the first timestamp.

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12           **25.**    A method as recited in claim 19 wherein receiving the second  
13 timestamp includes updating timing parameters with the information contained in  
14 the second timestamp.

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16           **26.**    One or more computer-readable memories containing a computer  
17 program that is executable by a processor to perform the method recited in claim  
18 19.

1           27. One or more computer-readable media having stored thereon a  
2 computer program that, when executed by one or more processors, causes the one  
3 or more processors to:

4           encode a first frame of data;

5           generate a first timestamp associated with the first frame of data, wherein  
6 the first timestamp includes complete time information;

7           encode a plurality of subsequent frames of data; and

8           generate a plurality of subsequent timestamps, wherein each of the  
9 subsequent timestamps includes a portion of the time information.  
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11           28. One or more computer-readable media as recited in claim 27  
12 wherein the complete time information includes hour information, minute  
13 information, second information, and a frame number.  
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15           29. One or more computer-readable media as recited in claim 27  
16 wherein each of the subsequent timestamps includes a frame number.  
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1       **30.**     An apparatus comprising:  
2       an encoded multimedia content source; and  
3       a decoder coupled to receive encoded multimedia content from the encoded  
4 multimedia content source, wherein the video content includes a first frame of data  
5 having an associated first timestamp, such that the first timestamp includes  
6 complete timing information for the first frame of data, and wherein the encoded  
7 multimedia content includes a second frame of data having an associated second  
8 timestamp, such that the second timestamp includes a subset of the timing  
9 information included in the first timestamp.

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11       **31.**     An apparatus as recited in claim 30 wherein the decoder is  
12 configured to decode the first frame of data and the second frame of data.  
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